

electrode 12, their antinodes are consistent in their positions and they mutually intensifies at the region between the straight portions. As a result, plasma with a uniform density is generated in the region between the two straight portions of the electrode 12 and in the surrounding regions.

A1
Page 20, lines 14-21, delete current paragraph and insert therefor:

A2
According to the above embodiment, because an inductive coupling type electrode is used, there is the advantage that the plasma density can easily be raised compared with a capacitive coupling type electrode. Further, by making the electrode U-shaped and using one of the ends of the electrode as the feeding point, due to the interaction of the standing waves produced at the two bent back straight portions, the plasma is strengthened and the density of the plasma can be kept from becoming nonuniform.

IN THE CLAIMS:

Please replace claims 1-7 as follows:

A3
1. (Amended) In a plasma processing apparatus provided with an inductive coupled electrode for generating plasma in a vacuum processing chamber, the plasma processing apparatus wherein:

said electrode is formed by a conductive line-shaped member whose total length is substantially equal to a wavelength of a supplied high frequency power, and is formed so that;

one end of said electrode is grounded and another end thereof is connected to a high frequency power source for supplying said high frequency power, and a standing wave of one wavelength is produced along said electrode when said high frequency power source supplies said high frequency power to said electrode; and

a node of said standing wave produced along said electrode is formed at a central portion of said electrode, and an antinode of said standing wave is formed on both

portions respectively corresponding to a half portion of said electrode, which exist at both sides of said center point.

2. (Amended) A plasma processing apparatus as set forth in claim 1, wherein said electrode is formed to be U-shaped by bending said electrode back at said central portion, and each of the half portions of said electrode corresponds to a straight portion, and both of the half portions are arranged in parallel.

3. (Amended) A plasma processing apparatus as set forth in claim 1, wherein a length of the half portion of said electrode is substantially equal to a half of the wavelength of said high frequency power.

4. (Amended) A plasma processing apparatus as set forth in claim 1, wherein a plurality of said electrodes are arranged to make a stratified structure comprising a plurality of layers within said vacuum processing chamber, a plurality of film depositing regions are produced using a space between said electrodes included in said plurality of layers, and film deposition on a substrate is performed in each of said plurality of film depositing regions.

A3
Curt

5. (Amended) In a plasma processing apparatus provided with an inductive coupled electrode for generating plasma in a vacuum processing chamber, the plasma processing apparatus wherein:

 said electrode is formed by a conductive line-shaped member whose total length is determined to natural number times of a half of a wavelength of a supplied high frequency power, and is formed so that;

 one end of said electrode is grounded and another end thereof is connected to a high frequency power source for supplying said high frequency power, and standing waves are produced along said electrode when said high frequency power source supplies said high frequency to said electrode; and

 a node of said standing waves produced along said electrode is formed at a

central portion of said electrode, and at least one antinode of said standing waves is formed on both portions respectively corresponding to a half portion of said electrode, which existing at both sides of said center point.

6. (Amended) A plasma processing apparatus as set forth in claim 5, wherein said electrode is formed to be U-shaped by bending said electrode back at said central portion, and each of the half portions of said electrode is a straight portion, both of the half portions are arranged in parallel, and said node of said standing wave is consistent with a bending back point.

A3
cont

7. (Amended) A plasma processing apparatus as set forth in claim 5, wherein a plurality of said electrodes are arranged to make a stratified structure comprising a plurality of layers within said vacuum processing chamber, a plurality of film depositing regions are produced using a space between said electrodes included in said plurality of layers, and film deposition on a substrate is performed in each of said plurality of film depositing regions.

REMARKS

Claims 1-18 are pending. Claims 8-18 are withdrawn from consideration as being drawn to a non-elected Group or Species. By this Amendment, the specification and claims 1-7 are amended. No new matter is added by any of these amendments.

Reconsideration based on the following remarks is respectfully requested.

The attached Appendix includes a marked-up copy of each rewritten paragraph (37 CFR §1.121(b)(1)(iii)), and each rewritten claim (37 CFR §1.121(c)(1)(ii)).

I. Claims 1-7 Satisfy the Requirements under 35 U.S.C. §112, second paragraph

The Office Action rejects claims 1-7 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1-7 have been amended to obviate this rejection in view of the